

In the specification:

Page 1, immediately following the title, insert the following:

--CROSS-REFERENCE TO RELATED APPLICATION(S)

This application is a continuation of U.S. Serial No. 09/054,468, filed April 3, 1998.--

Please amend the paragraph beginning at page 8, line 24, as follows:

-- At the receiver 14, the signal passes through an analog-to-digital (A/D) converter ~~75~~ 80 and then through an impulse shortening filter 90. An analog receive filter ~~85~~ 75 may be included prior to the A/D converter in order to band limit the received signal. A prefix stripper 100 strips the cyclic prefixes from the resulting symbols and a serial to parallel converter 110 divides the stream of time samples into parallel signal paths that form the inputs to a discrete Fourier transform (DFT) 120. The DFT 120 converts the time samples into subsymbols. A decoder 130 converts the subsymbols into a data bits and outputs the resulting data.--

Please amend the paragraph beginning at page 10, line 27, as follows:

-- To avoid the possible attenuation of frequency bands, the spectral response of the impulse shortening filter is further required to have a spectral response, ~~that~~ $G(\omega)$, that meets a specified spectral constraint. A spectral constraint of the form $G(\omega)H(\omega) > \tau$, where τ is a threshold, is sufficient to avoid nulls in the frequency response of the impulse shortening filter. However, it is possible to compute a spectral constraint or target spectral response, $G_d(\omega)$, that provides additional performance improvements, such as reducing noise bleeding between subchannels. A spectrally constrained impulse filter is configured to have a spectral response that approximates the target spectral response.--